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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,407	10/24/2003	Paul C. Roberts	MSFT-2817/301134.01	1473

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

CHAI, LONGBIT

ART UNIT PAPER NUMBER

2131

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/693,407	ROBERTS ET AL.	
	Examiner	Art Unit	
	Longbit Chai	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/18/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. No claim for priority has been made in this application.

The effective filing date for the subject matter defined in the pending claims in this application is 10/24/2003.

Claim Objections

2. Claims 1 and 11 are objected to because of the following informalities: "A method for providing ..., comprising:" should be "A method for providing ..., comprising the steps of:" so that the dependent claims can properly use "said step of" (for example, claims 3, 4, 6, 7 and 12 – 13). Similar reason of objection is also applied to dependent claim 8 for correcting "comprising the steps of:"

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 14 – 23 and 24 – 26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter where "A computer readable medium containing computer executable instructions" as recited in the claims may be reasonably interpreted as being not limited to computer readable storage

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media, for example, as referred to in Specification (SPEC: Page 6, Para [0026]) as being intended to include communication media that include a modulated data signal such as a carrier wave that "bears" instructions as claimed. Such embodiments of the "manufacture" claims 14 – 23 and 24 – 26 are not computer elements which define structural and functional interrelationships between the instructions and the rest of the computer that permit the functionality of the instructions to be realized. Thus, for at least this reason, claims 14 – 23 and 24 – 26 are directed to a non-statutory subject matter as not being tangible and concrete and it would not be eligible for patentability because it would be eligible for patentability if a practical application was present that produced a useful, concrete and tangible result upon execution of the instructions.

Double Patenting

4. The nonstatutory provisional double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

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patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 14 and 27 are rejected under the judicially created doctrine of obviousness-type provisional double patenting as being unpatentable over claims 1, 15 and 29 of copending application 10/693,061. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 14 and 27 of the instant application are envisioned by the claims of the copending application that contain all the limitations of claims of the instant application where Examiner notes a user input not intended for a secured execution environment as recited in the instant application is obviously equivalent to a standard input mode as recited in the copending application and as such claims of the instant application are not patently distinct from the earlier copending application claim and as such are unpatentable for obvious-type provisional double patenting.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 12, 22, 25, 35 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12, 22, 25, 35 and 38 are indefinite because there is insufficient antecedent basis for the claim limitation "said output data" since it is not clear, for example, whether "said output data" includes entire "said output", as previously recited, or merely the data portion of "said output".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 – 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Boebert et al. (U.S. Patent 5,822,435).

As per claim 1 and 14, Boebert teaches a method for providing a secure user interface to a secured execution environment on a system (Boebert : Figure 4) comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

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accepting user input from a user input device (Boebert : Figure 2 / Element 20 and Column 3 Line 25 – 26);

determining whether said user input is intended for said secured execution environment (Boebert : Column 5 Line 27 and Column 6 Line 26 – 29: the user invokes the trusted path mode is considered as intended for said secured execution environment);

if said user input is not intended for said secured execution environment, transferring said user input to said second execution environment (Boebert : Column 5 Line 44 – 46 / Line 18 – 24 and Figure 4 / Element 34 & 36: (a) in trusted path mode, keyboard manager intercepts keyboard data intended for workstation and the data is then routed to cryptographic entity (b) in normal mode, logical switches are in the UP position, connecting workstation processor directly to keyboard and display and thus permits the free transfer of information from keyboard to workstation and from workstation to display).

As per claim 27, Boebert teaches a trusted user interface engine (Boebert : Figure 4 / Element 30) for providing a secure user interface to a secured execution environment on a system comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

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an input trusted service provider accepting user input from a user input device, operably connected to said user device (Boebert : Column 6 Line 26 – 29: trusted path subsystem is considered as an input trusted service provider);

a trusted input manager for determining whether said user input is intended for said secured execution environment (Boebert : Column 6 Line 26 – 29 and Column 5 Line 27: the trusted path subsystem is considered as an trusted input manager and the user invokes the trusted path mode is considered as intended for said secured execution environment) and, if said user input is not intended for said secured execution environment, transferring said user input to said second execution environment (Boebert : Column 5 Line 44 – 46 / Line 18 – 24 and Figure 4 / Element 34 & 36: (a) in trusted path mode, keyboard manager intercepts keyboard data intended for workstation and the data is then routed to cryptographic entity (b) in normal mode, logical switches are in the UP position, connecting workstation processor directly to keyboard and display and thus permits the free transfer of information from keyboard to workstation and from workstation to display).

As per claim 11 and 24, Boebert teaches a method for providing a secure user interface to a secured execution environment on a system (Boebert : Figure 4) comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

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accepting output from a specific source entity in said secured execution environment (Boebert : Column 8 Line 45 – 50: a trusted path mode is considered as a secured execution environment); and

securely transferring said output to an output device (Boebert : Column 8 Line 57 – 63: in a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

As per claim 37, Boebert teaches a trusted user interface engine (Boebert : Figure 4 / Element 30) for providing a secure user interface to a secured execution environment on a system comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

a trusted output manager that accepts output from a specific source entity in said secured execution environment (Boebert : Column 8 Line 45 – 50: a trusted path mode is considered as a secured execution environment and a video manager used in a trusted path mode is qualified as a trusted output manager); and that

securely transfers said output to an output device (Boebert : Column 8 Line 57 – 63: in a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

As per claim 2, 15 and 28, Boebert teaches said step of accepting user input from a user input device comprises decrypting said user input (Boebert : Column 3 Line 26 – 30).

As per claim 3, 16 and 29, Boebert teaches establishing a secure communications channel with said user input (Boebert : Column 3 Line 26 – 30: the user input is encrypted first).

As per claim 4, 17 and 30, Boebert teaches verifying said user input (Boebert : Column 6 Line 26 – 29).

As per claim 5, 18 and 31, Boebert teaches if said user input is intended for said secured execution environment, determining a specific destination entity in said secured execution environment for said user input; and transferring said user input to said specific destination entity (Boebert : Column 5 Line 27 / Line 44 – 46 and Column 8 Line 57 – 63).

As per claim 6, 19, Boebert teaches providing window management functionality for managing at least one graphical user interface element owned by said specific destination entity (Boebert : Column 6 Line 53 – 59 and Column 8 Line 57 – 63); and determining that said user input relates to said graphical user interface element (Boebert : Column Column 8 Line 60 – 63 and Figure 6 / Element 82).

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As per claim 7, 20 and 33, Boebert teaches interpreting said user input (Boebert : Column 6 Line 26 – 29 and Column 5 Line 27).

As per claim 8, 21 and 34, Boebert teaches accepting output from a specific source entity in said secured execution environment (Boebert : Column 8 Line 45 – 50: a trusted path mode is considered as a secured execution environment); and securely transferring said output to an output device (Boebert : Column 8 Line 57 – 63: in a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

As per claim 9, 12, 22, 25, 35 and 38, Boebert teaches encrypting said output data (Boebert : Column 3 Line 26 – 28: data transfeerrde from an output device is encrypted first).

As per claim 10, 13, 23, 26, 36 and 39, Boebert teaches transferring said output to a curtained memory (Boebert : Column 8 Line 57 – 63: a curtained memory is interpreted a protected memory area. In a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

As per claim 32, Boebert teaches a trusted window manager that provides window management functionality for managing at least one graphical user interface

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element owned by said specific destination entity (Boebert : Column 6 Line 53 – 59 and Column 8 Line 57 – 63 & Figure 6 / Element 82: a trusted window is owned by a specific destination entity); and where said trusted input manager determines that said user input relates to said graphical user interface element (Boebert : Column 6 Line 26 – 26 / Line 44 – 59 and Column 8 Line 57 – 63 & Figure 6 / Element 82).

As per claim 40, Boebert teaches a trusted rendering interface providing rendering said output from said specific source entity (Boebert : Column 8 Line 48 – 63: a trusted video manager and a trusted window for a specific user screen display); and where said secure transfer is a transfer of said rendered output (Boebert : Column 8 Line 57 – 63: a curtained memory is interpreted a protected memory area. In a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Longbit Chai, Ph.D.
Patent Examiner
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2/8/2007